

# THE COMPLEMENT *FactsBook*

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Abbreviations \_\_\_\_\_

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Introduction \_\_\_\_\_  
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*Franz Petry and Michael Loos*

Mannose-binding lectin \_\_\_\_\_

*Peter Lawson and K.B.M. Reid*

Bovine conglutinin \_\_\_\_\_

*Peter Lawson and K.B.M. Reid*

SP-A \_\_\_\_\_

*Robert B. Sim*

SP-D \_\_\_\_\_

*Robert B. Sim*

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C1r \_\_\_\_\_

*Nicole Thielens and Gérard J.*

*Arlaud*

C1s \_\_\_\_\_

*Nicole Thielens and Gérard J.*

*Arlaud*

MASP-1 \_\_\_\_\_

*Teizo Fujita, Yuichi Endo and*

*Misao Matsushita*

MASP-2 \_\_\_\_\_

*Steen V. Petersen and Jens C.*

*Jensenius*

## The Complement System

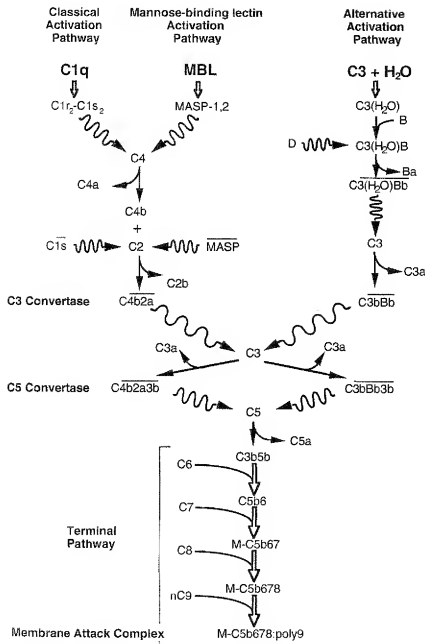


Figure 8. Overview of the activation of the complement system. Open arrows represent activation via changes in conformation while  $\rightarrow$  represents an enzymatic cleavage step. Overlined components (C1s) are activated enzymes, derived from zymogen precursors.

## Classical pathway

The C1 complex, which is a multimolecular complex consisting of each of C1r and C1s. The binding of immunoglobulins, specifically and enzymatic changes within a variety of pathogens in the [C1-INH] is displaced from the C1r. This in turn cleaves a molecule of C1s and then as a protease. At this point, C1INH and C1s active sites, causing the

Activated C1s cleaves C4, r and C4b. Exposed within the bond [C4b\*]. Most of this C4b presence of an activating surface C4b\* reacts with hydroxyl or deposition in clusters close to acceptor for binding of C2, which is released while the C2a, cor C4b and forms the classical pathway C3 cleaves C3 at a single point in the highly labile C3b\*. As with thioester which is now available. Binding of C3 in the vicinity of classical pathway C5 convertase extremely labile and consequently will escape hydrolysis during activation, with activating cell surface for each.

It is this amplification which were not carefully regulated. The role of C1INH has already been function either to inhibit as dissociation and catabolism. Factor inactivates both C3b and C4b (both membrane-bound) or for phase cofactor for C3 degradation function in the classical pathway membrane-bound protein, according

## Mannose-binding lectin

The lectin pathway is highly active and C4 with it. However, the difference lying in the C1 complex is replaced by a mannose-2. MBL is activated by binding